

REMARKS

Reissue Applicant Michel Gondouin through his filing of a cover sheet, application papers, and a Preliminary Amendment is presenting in this continuation reissue application claims 8-78. The specification has been specifically amended to indicate that this is a continuation of Reissue Application Serial No. 08/961,457, which is presently pending before this Office. Applicant has also canceled original patent claims 1-7, because those claims are pending in the parent reissue application. Accordingly, the status of all patent claims and claims added during the pendency of this reissue is that original patent claims 1-7 are canceled and claims 8-78 have been added and are pending.

Claims 8-78 are fully supported by Applicant's disclosure. Each claim is directed, inter alia, to a method of forming a second borehole from a first borehole, that is cased. In each claim a portion of the first borehole is under-reamed at the location of the first borehole to be formed. The method includes the steps of running a joint assembly through the casing of the first borehole, installing the joint assembly at the under-reamed portion of the first borehole, expanding an expandable portion of the joint assembly outward into the under-reamed portion of the first borehole, applying settable material into the under-reamed portion and about at least the expanded portion of the joint assembly, and drilling a second borehole along the expanded portion, when in the expanded state. The expanded portion serves as a guide for drilling the second borehole. Applicant discloses one embodiment of the invention in case 4a and the associated drawing at Fig. 10. The casing patch or joint assembly of case 4a has close similarities to the joint assembly of case 4, as taught by the patent. *See, e.g.*, 16:17-23. In case 4

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and Fig. 4, the casing joint assembly is run into the well as part of a casing string. Given the remaining close similarities, the relevant disclosures of both cases 4 and 4a are at times referenced in the following discussion regarding support.

For instance, Applicant discloses installing casing in at least a portion of the first borehole and under-reaming a portion of the first borehole at the location of the second borehole to be formed as claimed in claim 8. *See, e.g.*, 8:47-49, 57-62; 16:11-13. Applicant further discloses running a joint assembly through the casing in the first borehole and installing the assembly, which includes at least one expandable portion to serve as a guide for drilling the second borehole, at the under-reamed portion of the first borehole. *See, e.g.*, 16:17-41; 49-52. Also, Applicant discloses expanding the expandable portion of joint assembly outward into the under-reamed portion of the first borehole, and applying settable material the under-reamed portion and about at least the expanded portion of the joint assembly. *See, e.g.*, 8:58-64; 16:17-28; 38-41. Further, a second borehole may be drilled along the expandable portion, when in the expanded state. *See, e.g.*, 8:57-62; 9:13-18; 16:17-23; 49-52. Thus, independent claim 8 is fully supported by Applicant's disclosure.

Independent claim 32 is likewise fully supported. For instance, Applicant discloses under-reaming a portion of the first borehole having casing along at least a portion of its length. *See, e.g.*, 8:57-62; 9:4-8; 16:11-13. Applicant further discloses running a joint assembly through the casing in the first borehole and installing the assembly at the under-reamed portion of the first borehole, wherein the assembly includes at least one expandable member adapted to pass along with the assembly through the casing in the first borehole in an unexpanded state and adapted to

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be expanded into the under-reamed portion as claimed in claim 32. *See, e.g.*, 16:13-41. The expandable member may serve as a guide for drilling the second borehole when in the expanded state. *See, e.g.*, 8:57-62; 16:17-23; 49-52. Applicant also discloses that the casing joint assembly may be expanded outwardly into the under-reamed portion of the first borehole and settable material may be applied into the under-reamed portion and about at least a portion of the expandable member. *See, e.g.*, 8:58-64; 16:17-28; 38-41. A second borehole may also be drilled along the expanded portion of the casing joint assembly. *See, e.g.*, 8:57-62; 9:13-18; 16:17-23; 49-52. Thus, claim ³²~~34~~ is fully supported.

Similarly, independent claim 56 is also supported by Applicant's disclosures. For instance, Applicant discloses under-reaming a portion of the first borehole. *See, e.g.*, 8:57-62; 9:4-8; 16:11-13. Applicant also discloses running the joint assembly through the casing in the first borehole and installing the assembly at the under-reamed portion of the first borehole. *See, e.g.*, 16:13-41. The assembly may include an expandable portion, which passes with the joint assembly through the casing in the first borehole in an unexpanded state and is extendable to an expanded state in the under-reamed portion. *See, e.g.*, 16:13-41. The expandable portion may be sufficiently rigid when in the expanded state for supporting and guiding a tool for drilling the second borehole. *See, e.g.*, 8:57-64; 16:17-23. Applicant further discloses expanding the expandable portion of the joint assembly outwardly into the under-reamed portion and applying settable material into the under-reamed portion and about at least the expandable portion of the joint assembly. *See, e.g.*, 8:58-64; 16:17-28; 38-41. As Applicant discloses, a second borehole may be drilled through the joint assembly and along the expandable portion, when in the

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claimed in claim 16, 40, and 64. *See, e.g.*, 7:67; 8:1-20, 57-64; 9:2-3, 8-10; 16:17-23. Applicant further discloses that the expandable portion or expandable member, when expanded, is oriented at a preselected kick-off angle for the second borehole, as claimed in claims 17, 41, and 65. *See, e.g.*, 8:54-57; 16:17-23. Likewise, Applicant discloses that the expandable portion or expandable member is supported during run in by a portion of the joint assembly, as claimed in claims 18, 42, and 66, and guided during its outward expansion by a portion of the joint assembly, as claimed in claims 19, 43, and 67. *See, e.g.*, 8:62-64; 16:17-23, 28-31.

Applicant also discloses that the expandable portion or expandable member may be generally tubular member when in the expanded state, as claimed in claims 20, 44, and 68 (*see, e.g.*, 8:62-64; 16:17-23; Figs. 4 and 10) and may be sufficiently rigid, when expanded, to support and direct a drilling tool, as claimed in claims 21 and 45 (*see, e.g.*, 8:57-62; 16:17-23, 49-51).

Applicant also discloses that after the expandable portion or expandable member has been expanded, the joint assembly may provide two downwardly directed members through which two different boreholes may extend, as claimed in claims 22, 46, and 69. *See, e.g.*, Figs. 4 and 10. Applicant further discloses that the downwardly directed members may be generally cylindrical in shape, as claimed in claims 23, 47, and 70, *see, e.g.*, 8:62-64; 16:17-23; Figs. 4 and 10.

Applicant also discloses that an inflatable bladder may cover the joint assembly and that the inflatable bladder may be filled with settable material when the joint assembly is in the under-reamed portion of the first borehole, the settable material urging the bladder against the walls of the under-reamed portion of the first borehole, as claimed in claims 24, 48, and 71. *See, e.g.*, 17-28, 38-41. Applicant also discloses that steam may be injected into at least one of said first and

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second boreholes and producing oil from one or both of said boreholes, as claimed in claims 25, 49, and 72. *See, e.g.*, 14: 9-12, 26-31; 15:2-7. In addition, Applicant discloses clearing the joint assembly to its full bore opening to provide access for tools into the second borehole, as claimed in claims 26, 50, and 73. *See, e.g.*, 9:13-18; 16:49-52; 16:17-23, 41-44, .

Similarly, Applicant discloses running a liner assembly through the expandable portion or expandable member, when expanded, and into the drilled second borehole, as claimed in claims 27, 51, and 74. *See, e.g.*, 9:10-13, 19-23; 16:49-53. Applicant further discloses that the liner assembly may be hung from the joint assembly, including the expandable portion or expandable member of the joint assembly, to complete the well, as claimed in claims 28, 29, 52, 53, 75, and 76. *See, e.g.*, 9:19-23; 16:49-53. Likewise, Applicant discloses cementing the liner assembly in the second borehole, as claimed in claims 30, 54, and 77 (*see, e.g.*, 21-23, 16:49-53), and connecting a completion tubing in a sealed relationship with the liner assembly, as claimed in claims 31, 55, and 78 (*see, e.g.*, 9:10-13, 28-36; 16:49-53).

For at least the reasons stated above, Applicant respectfully submits that all of his claims are fully supported by his disclosure.

Applicant is also presenting proposed amendments to Figs. 4 and 10. These proposed amendments were discussed during an interview with the Examiner in the parent application and were presented at the Examiner's request, set forth in an Office Action dated December 7, 2000, in the parent application. During the interview, Applicant and the Examiner discussed the original patent disclosure and drawings. These proposed drawing changes were attached to the Interview Summary dated February 7, 2001. As the Examiner acknowledged in the Interview

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Summary, the proposed changes to the drawings are supported by Applicant's disclosure.

Applicant fully describes the operation of liner stubs (39) and the inner and outer guides (42) and (41). *See, e.g.*, 7:67; 8:1-11, 54-67; 9:1-19; 16:17-44; Fig. 3A.

For instance, Applicant describes how the liner stubs are supported during run-in and guided during its outward expansion by inner guides and outer guides. *See, e.g.*, 8:62-64; 16:28-31. Applicant describes that the outer guide (41) is fixed to the casing and the inner guide (42) is mobile and slides within the fixed guide over only half of the stub (39) extension, while providing a cantilevered sliding internal support to the extended stub. *See, e.g.*, 8:64-67; 9:1; 16:28-31. Applicant also describes that the liner stub has drillable collar (35) and gasket (36), *see, e.g.*, 9:1-2; 16:17-23, 41-43, which he further describes in reference to Case 3 and shows in Fig. 3A. *See, e.g.*, Fig. 3A; 7:67; 8:1-11. Applicant explains that the liner stub and the collar are machined to conform with the window. *See, e.g.*, 9:8-10. This description, as well as other portions of Applicant's disclosure, fully supports Applicant's proposed drawing changes.

Applicant is formally submitting the proposed drawing changes in the accompanying Request for Approval of Drawing Changes. These drawings are the same as the drawings considered and accepted by the Examiner in the parent case. Applicant submits that these proposed drawings fully comply with the Office's Rules and the MPEP.

The MPEP instructs that the "provisions of 37 CFR § 1.121(b)(3) govern the manner of making amendments to the drawings in a reissue application." MPEP § 1413. According to 37 CFR § 1.121, "[a]ny change to the patent drawings must be by way of a new sheet of drawings with the figures identified as 'amended.'" § 1.121(b)(3)(i). Section 1.121 further explains "where a

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change to the drawing is desired, a sketch in permanent ink showing proposed changes in red" must be filed. § 1.21(b)(3)(ii).

Applicant's proposed changes have been submitted on new sheets of drawings with Figs. 4 and 10 identified as "amended." Further, Applicant's submission constitutes a sketch in permanent ink and the proposed changes have been shown in red. Thus, Applicant's proposed drawing changes fully comply with the Rules. Since these changes are fully supported by Applicant's disclosure as discussed above, Applicant respectfully requests approval of these changes. Upon receiving approval, Applicant will submit formal drawings.

Pursuant to the condition of the Decision of this Office dated October 8, 1999, granting Applicant's Petition for the original filing date in the parent application, Applicant has canceled figures 3 and 6. The changes to these drawings have been made in accordance with the procedures set forth for reissue applications in Section 1413 of the M.P.E.P. According to that section, the original drawings are enclosed within brackets (shown in red) and identified as "CANCELED" (again in red).

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